

Figure 1 illustrates a perspective view of a MEMS device, according to an embodiment;

Figure 2 illustrates a cross-section of the MEMS device of figure 1;

Figures 3 illustrates a cross-section of a MEMS data storage device, according to an embodiment;

Figures 4A-⁴~~B~~ illustrate cross-sections of a MEMS transducer device, according to an embodiment; and

Figure 5 illustrates a cross-section of a MEMS transducer device, according to another embodiment.

DETAILED DESCRIPTION OF EMBODIMENTS

According to an embodiment, a MEMS comprises at least three-wafers. The three wafers are sealed together to form a one-chip MEMS device. According to another embodiment, a three-wafer MEMS device comprises a transducer. According to yet another embodiment, a three-wafer MEMS device comprises a storage device.

Figure 1 illustrates a perspective view of a MEMS device 10, according to an embodiment. The MEMS device 10 includes a middle wafer 40 positioned between an upper wafer 30 and a lower wafer 20. A material 60 bonds the wafers 20, 30 and 40 together to form a single chip. The material 60 also seals the device 10. A cavity 80 is formed between the upper wafer 30 and lower wafer 20. The cavity 80 is sealed by the material 60. The material 60 may comprise a wafer bonding material, or the like.

The middle wafer 40 includes a movable portion 50 capable of moving relative to the lower and upper wafers 20 and 30 within the cavity 80. For example, the middle wafer 40